

Claims

[c1] What is claimed is:

1.A battery module of a mobile phone, the battery module comprising:

a camera module for capturing digital images;

a memory for storing digital images captured with the camera module;

a first interface for connecting to the mobile phone for transmitting captured digital images from the battery module to the mobile phone;

a battery cell for supplying electrical power; and

a plurality of battery contacts for contacting corresponding battery connectors of the mobile phone and for providing electrical power supplied by the battery cell to the mobile phone.

[c2] 2.The battery module of claim 1 further comprising a first button for taking pictures when the first button is pressed.

[c3] 3.The battery module of claim 2 further comprising a second button for powering the camera module on and off.

- [c4] 4.The battery module of claim 1 further comprising a first button for taking pictures when the first button is pressed for a period of time within a first predetermined range of times, and for powering the camera module on and off when the first button is pressed for a period of time within a second predetermined range of times.
- [c5] 5.The battery module of claim 1 wherein the first interface comprises first and second pins of the battery module electrically connecting to a receive pin and a transmit pin of the mobile phone for facilitating communication between the battery module and the mobile phone and for transmitting captured digital images from the battery module to the mobile phone.
- [c6] 6.The battery module of claim 1 wherein the first interface is an RS232 serial interface.
- [c7] 7.The battery module of claim 1 wherein the first interface is a universal serial bus (USB) interface.
- [c8] 8.The battery module of claim 1 further comprising a second interface for connecting to an external computer for transmitting captured digital images from the battery module to the external computer.
- [c9] 9.The battery module of claim 1 wherein the memory is a flash memory for storing the digital images in a non-

volatile manner.

[c10] 10. A mobile phone capable of capturing digital images, the mobile phone comprising:

- a housing;
- a cavity in the housing formed for receiving a battery;
- a battery module removably disposed in the cavity of the mobile phone housing, the battery module comprising:
 - a camera module for capturing digital images;
 - a memory for storing digital images captured with the camera module;
 - a first interface for electrically connecting to the mobile phone for transmitting captured digital images from the battery module to circuitry of the mobile phone;
 - a battery cell for supplying electrical power; and
 - a plurality of battery contacts for providing electrical power supplied by the battery cell to the mobile phone;
- a plurality of battery connectors corresponding to the battery contacts of the battery module for receiving electrical power from the battery cell; and
- an interface corresponding to the first interface of the battery module for transmitting digital images received through the first interface of the battery module to the circuitry of the mobile phone.

[c11] 11. The mobile phone of claim 10 wherein the battery module further comprises a first button for taking pic-

tures when the first button is pressed.

- [c12] 12.The mobile phone of claim 11 wherein the battery module further comprises a second button for powering the camera module on and off.
- [c13] 13.The mobile phone of claim 10 wherein the battery module further comprises a first button for taking pictures when the first button is pressed for a period of time within a first predetermined range of times, and for powering the camera module on and off when the first button is pressed for a period of time within a second predetermined range of times.
- [c14] 14.The mobile phone of claim 10 wherein the first interface of the battery module comprises first and second pins, the interface of the mobile phone comprises a receive pin and a transmit pin, and the first and second pins electrically connect to the receive pin and the transmit pin for facilitating communication between the battery module and the circuitry of the mobile phone and for transmitting captured digital images from the battery module to the circuitry of the mobile phone.
- [c15] 15.The mobile phone of claim 10 wherein the first interface is an RS232 serial interface.
- [c16] 16.The mobile phone of claim 10 wherein the first inter-

face is a universal serial bus (USB) interface.

[c17] 17.The mobile phone of claim 10 wherein the battery module further comprises a second interface for connecting to an external computer for transmitting captured digital images from the battery module to the external computer.

[c18] 18.The mobile phone of claim 10 wherein the memory is a flash memory for storing the digital images in a non-volatile manner.